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Serial No. 10/521,943 Docket No. PTGF-04078US

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REMARKS

Claims 1-29 and 34-35 are all of the claims presently pending in the application. Applicants have canceled claims 30-33 without prejudice or disclaimer. Claims 1, 2, 14, and 29 have been amended to more particularly define the claimed invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1, 2, 10, 13-17, 21, 22, and 25-35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Smith et al. (U.S. Patent NO. 6,851,835). Claims 3, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. in view of Hecht (U.S. Patent No. 6,871,993) and Zhang et al. (U.S. Patent No. 5,924,785). Claims 4-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. in view of Young (U.S. Patent No. 6,672,741). Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Young in view of Lowery (U.S. Patent No. 5,959,316). Claims 19, 20, and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. in view of McCullough et al. (U.S. Publication No. 2004/0252502). Claims 29 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Newby (U.S. Patent No. 6,999,318) in view of Zhang.

These rejections are respectfully traversed in the following discussion.

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I. THE CLAIMED INVENTION

The invention of claim 1, for example, is directed to a light emitting apparatus that includes a light source section having a solid-state light emitting element, a power supply member that supplies power to the light source section, a reflection section that is disposed opposite to a light extraction surface of the light source section to reflect light emitted from the light source section, a heat radiation member that is disposed with a heat radiation width in a back direction of the light source section, and an insulating layer disposed between the power supply section and the heat radiation section. The heat radiation member includes a planar member disposed parallel to a light extraction direction of the light emitting apparatus, and the power supply member, which is separate from the heat radiation member, is secured to an end face of the planar member. The light source section is mounted on the end face of the planar member. The planar member is disposed parallel to a longitudinal direction of the power supply member (See Application at Figs. 1A to 1D, 2, 3A, to 3C).

This structure is important because the planar member can prevent the blocking of light that is emitted from the light emitting element. Further, because the power supply section is formed along a bottom of the planar member, the invention has the effect that the heat radiation section can efficiently radiate heat generated from the power supply section during the operation of the light emitting element. In addition, since the power supply section is insulated from the heat radiation section by the insulation layer disposed therebetween and the heat radiation section (planar member) elongates in the height direction of the apparatus, a steep heat gradient can be formed in the height direction, i.e., between the power supply section and the top of the heat radiation section (planar member), so that the heat generated from the power supply section (lead) can be more quickly transmitted through the heat radiation section (Application at page 2, lines 25-28 and page 14, lines 8-20)

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In a conventional light emitting apparatus, as described in the Background of the present application, if the size of a power lead is increased to cope with increased heat generation from the light source, the light emission efficiency is decreased due to blockage of the light by the enlarged power lead (Application at page 2, lines 17-24).

In contrast, an exemplary aspect of this invention may provide for dissipation of heat from the light source without interfering with light emission (Application at page 14, lines 7-21).

II. THE PRIOR ART REFERENCES

A. The Smith Reference

The Examiner alleges that Smith teaches the claimed invention of claims 1, 2, 10, 13-17, 21, 22, and 25-35. Furthermore, the Examiner alleges that the claimed invention of claims 19, 20, and 23 would have been obvious in view of Smith. Applicants submit, however, that there are elements of the claimed invention which are neither taught nor suggested by Smith.

Smith fails to teach or suggest that "the planar member is disposed parallel to a longitudinal direction of the power supply member" as recited by the exemplary claims 1 and similar claims 2, 14, and 29.

As shown in Fig. 7 of Smith, the planar member of heat sinks (40) is disposed perpendicular to the longitudinal direction (i.e. perpendicular to line C-C in Fig. 7 of Smith) of a PC board (30) (see Figs. 1 and 1A), which is alleged by the Examiner to correspond to the power supply member (see Office Action page 2).

Therefore, Applicants submit that there are elements of the claimed invention that are not taught or suggest by Smith. Therefore, the Examiner is respectfully requested to withdraw this rejection.

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B. The Hecht and Zhang References

The Examiner alleges that Smith would have been combined with Hecht and Zhang to teach the claimed invention of claims 3, 11, and 12. Applicants submit, however, that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, Applicants submit that claims 3, 11, and 12 are allowable at least based on similar reasons to those set forth above in section A with respect to claims 1, 2, 10, 13-17, 21, 22, and 25-35.

Therefore, Applicants submit that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

C. The Young Reference

The Examiner alleges that Young would have been combined with Smith to teach the claimed invention of claims 4-9. Applicants submit, however, that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, Applicants submit that claims 4-9 are allowable at least based on similar reasons to those set forth above in section A with respect to claims 1, 2, 10, 13-17, 21, 22, and 25-35.

Therefore, Applicants submit that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

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D. The Lowery Reference

The Examiner alleges that Lowery would have been combined with Young to teach the claimed invention of claim 18. Applicants submit, however, that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, Applicants submit that claim 18 is allowable at least based on similar reasons to those set forth above in section A with respect to claims 1, 2, 10, 13-17, 21, 22, and 25-35.

Moreover, Applicants submit that the basis of the Examiner's rejection of claim 18 is clearly erroneous. That is, claim 18 depends from claim 17, which depends from claim 1. The Examiner rejected claims 1 and 17 under 35 U.S.C. § 102(b) as being anticipated by Smith. Accordingly, the Examiners' rejection of claim 18 should have included the Smith reference. Appropriate correction is requested in a new Office Action.

Therefore, Applicants submit that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

E. The McCullough Reference

The Examiner alleges that McCullough would have been combined with Smith to teach the claimed invention of claim 24. Applicants submit, however, that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, Applicants submit that claim 24 is allowable at least based on similar reasons to those set forth above in section A with respect to claims 1, 2, 10, 13-17, 21, 22, and 25-35.

Therefore, Applicants submit that, even if combined, the alleged combination of

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references would not teach or suggest each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

The Newby and Zhang References F.

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The Examiner alleges that Newby would have been combined with Zhang to teach the claimed invention of claims 29 and 33. Applicants submit, however, that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention.

That is, the alleged combination of references does not teach or suggest, "the power supply member is secured to an end face of the planar member", as recited in exemplary claim 29.

Indeed, the alleged combination of Zhang and Newby merely teaches a power supply section formed along a bottom of the planar member. The power supply member, however, is not secured to an end face of the planar member.

Moreover, the alleged combination of Newby and Zhang does not teach or suggest that, "the planar member is disposed parallel to a longitudinal direction of the power supply member," as recited by exemplary claim 29.

Therefore, Applicants submit that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

FORMAL MATTERS AND CONCLUSION Ш.

In view of the foregoing, Applicants submit that claims 1-29 and 34-35, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are

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in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a <u>telephonic or personal interview</u>.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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FACSIMILE TRANSMISSION

I hereby certify that I am filing this paper via facsimile, to Group Art Unit 2885, at (571) 273-8300, on March 5, 2008.

Date: 3/5/0 %

Respectfully Submitted.

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